## POLAROID ABSOLUTE ENCODER

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## ABSTRACT OF THE DISCLOSURE

A polaroid encoder system for detecting movement is disclosed. The system includes a movable polarizing code element. A detector module detects an amplitude based on how much illumination passes through one portion of the movable polarizing code element. A quadrant of the movable polarizing code element is determined based on how much illumination passes through another portion of the movable polarizing code element. The angular position of the movable polarizing code element can then be determined by using amplitude and the quadrant information.